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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,321	03/17/2004	Stefan Bengt Edlund	LOT920030123US1_014	3735
51835 7590 07/20/2011 IBM LOTUS & RATIONAL SW c/o GUERIN & RODRIGUEZ 5 MOUNT ROYAL AVENUE MOUNT ROYAL OFFICE PARK MARLBOROUGH, MA 01752				
EXAMINER				
TIMBLIN, ROBERT M				
ART UNIT		PAPER NUMBER		
2167				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/802,321

Applicant(s)

EDLUND ET AL.

Examiner

ROBERT TIMBLIN

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-16, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-16, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action corresponds to application 10/802,321, filed on 3/17/2004.

Response to Amendment

In the amendment dated 5/9/2011, Applicant therein amends claims 1 and 16. Claims 5 and 20 are canceled while no claims have been added; accordingly, claims 1-4, 7-16, and 18-19 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-11, 12, 13, 15, 16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loveland (U.S. Patent Application 2003/0162555) in view of Leung et al. ('Leung' hereafter, U.S. Patent 7,092,977) and further in view of Cameron et al. ('Cameron' hereafter, U.S. Patent Application 2003/0172113).

With respect to claim 1, Loveland teaches A method for synchronizing a client having a client database with a server having a server database, the method comprising:

calculating at the server database (0013, 0044, and 0056), for a plurality of clients (0039; e.g. a synchronization server that synchronizes with a number of wireless devices), a document score (0015; e.g. value of data is considered) for each document (0015; e.g. data) in a plurality of documents (0056; data items) in the server database (Fig. 2, server store 221), each document score designating an importance (0044; e.g. wherein important emails or contacts are determined and 0054; e.g. important information) relative to other documents (0044; e.g. emails from a particular sender may be of greater value to a user) of a respective one of the documents to a respective one of the clients (0058; e.g. information considered important of a mobile phone user) at one of the times (0059; e.g. account activity detected in the morning), each document score (0015; e.g. value of data) indicative of whether the document should be synchronized between the respective client and the server database (0013, 0015, and 0042; e.g. Loveland teaches selection rules take into consideration the value of data in the determining whether a data item ought to be synchronized), wherein calculating the document score includes determining whether a relationship exists between the respective document and another of the documents in the server database (0044);

initiating a synchronization task at one of the clients (0047; e.g. the determination to synchronize is a user-issued instruction from the mobile device user), the synchronization task for updating documents in the client database to match documents in the server database (0006), the synchronization task specifying a threshold value that indicates the document score value for a document to be synchronized (0045; e.g. data

items must have at least a predetermined value in order to be synchronized), and identifying the server and the server database for synchronization (0038);

a list of server documents produced based upon a comparison of the threshold value (0045) to the document scores (0056; e.g. the server determines which data items are appropriate to synchronize. Therein these items determined are interpreted as a "list"); and

Although Loveland teaches calculating a document score as determining the value of a data item and further at least calculating a document score for a time, Loveland does not appear to expressly teach calculating for a plurality of times, a document score.

Leung, however, teaches calculating for a plurality of times, a document score (col. 11 lines 53-67; e.g. data usage criteria information that specifies criteria related at least to a creation date, modification date, time of last access) for considering data usage information in determining placement of data.

Accordingly, in the same field of endeavor, (e.g. communicating data to a client), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the usage information as taught by Leung would have given Loveland the ability to further determine a value of a document to be synchronized for the benefit of making the synchronization more user-friendly and efficient. Loveland discloses a need for such a teaching in paragraphs 0058-0059 wherein a user desires the latest information.

Loveland teaches determining which data items are appropriate to synchronize and user selection of data item to synchronize (0056) as documents produced based upon a comparison of the threshold (0045, 0049); however, Loveland and Leung do not appear to expressly teach sending the appropriate items (i.e. sending from the identified server and server database to the client) as a list and sending from the client to the identified server a fetch list based upon the list of server documents; transmitting one of the documents in the server database to the client based on a the fetch list.

Cameron, however, discloses sending from the identified server and server database to the client a list of server documents (0052 wherein a list of documents are added to a synchronization list on the server 102 and the list of synchronizable documents are provided to the small device) and sending from the client to the identified server a fetch list based upon the list of server documents (0052 wherein a user may select documents from the list to be synchronized); transmitting one of the documents in the server database to the client based on a the fetch list (0052, 0056; e.g. transferring the server document in a synchronization process) for providing a list of documents to be selected to synchronize.

In the same field of endeavor, (i.e. synchronizing), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings provided by Cameron would have given a user of Loveland and Leung the ability to freely choose documents to be sent for synchronization to their device. Loveland discloses the need

when a user may manually select documents to synchronize (0056) and further wherein certain documents are to be synchronized with their device (0058-0060).

With respect to claim 2, Loveland teaches the method of claim 1 wherein the transmitting the step of sending comprises sending from the server to the client a list of server documents produced based upon a comparison of the threshold value to the document scores, wherein the list of server documents includes documents whose scores exceed the threshold value (0045).

With respect to claim 3, Loveland does not appear to teach the method of claim 2 further comprising determining the threshold value based on a data storage capacity of the client.

Leung, however, teaches determining the threshold value based on a data storage capacity of the client (col. 9 lines 25-30; e.g. storage capacity for a storage device) for allocating memory to a particular type.

Accordingly, in the same field of endeavor, (e.g. communicating data to a client), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the usage information as taught by Leung would have given Loveland the ability to efficiently utilize limited storage space (as suggested by use of a portable device).

With respect to claim 4, Loveland teaches the method of claim 1 wherein the calculating a document score for one of the documents is determined from at least one of a time of creation of the document, a number of times the document has been read, a time of last access of the document and an author of the document (0044; e.g. wherein senders of emails are interpreted as authors).

With respect to claim 7, Loveland and Leung do not appear to teach the method of claim 1 further comprising:

determining if the client database includes a newly created document; and transmitting the newly created document to the server.

Cameron, however, teaches determining if the client database includes a newly created document (0042; e.g. notification of changes); and

transmitting the newly created document to the server (0042; e.g. sending the entire document).

Accordingly, in the same field of endeavor, (i.e. synchronization), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Cameron would have given Loveland and Leung the ability to effectively notify the respective device (i.e. server or client) of changes for more efficiently synchronizing a document.

With respect to claim 8, Loveland teaches the method of claim 7 further comprising assigning a document score having a maximum value to the newly created document (0059).

With respect to claim 9, Loveland and Leung do not appear to teach the method of claim 1 further comprising:

determining if the client database includes a modified document; and transmitting the modified document to the server.

Cameron, however, teaches determining if the client database includes a modified document (0042; e.g. notification of changes); and

transmitting the modified document to the server (0042; e.g. sending the entire document).

Accordingly, In the same field of endeavor, (i.e. synchronization), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Cameron would have given Loveland and Leung the ability to effectively notify the respective device (i.e. server or client) of changes for more efficiently synchronizing a document.

With respect to claim 10, The combination of Loveland and Leung and Cameron further teach the method of claim 9 further comprising assigning a document score having a maximum value to the modified document (Leung, col. 11 line 57-62).

With respect to claim 11, Loveland teaches the method of claim 1 wherein the client database includes a plurality of client documents (0037), the method further comprising designating for deletion one of the client documents based on a document score of a complementary document in the server database (0055).

With respect to claim 12, Loveland teaches the method of claim 1 wherein the client database includes a plurality of client documents, the method further comprising removing one of the client documents from the client database based on a document score of a complementary document in the server database (0055).

With respect to claim 13, Loveland and Leung do not appear to teach the method of claim 9 further comprising resolving a conflict between the modified document in the client database and a modified document in the server database.

Cameron, however, teaches resolving a conflict between the modified document in the client database and a modified document in the server database (0078 and 100) for resolving a conflict in a synchronization process.

Accordingly, in the same field of endeavor, (i.e. synchronization), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Cameron would have given Loveland and Leung the ability to resolve a conflict of changes for more efficiently synchronizing a document.

With respect to claim 15, Loveland teaches the method of claim 11 further comprising increasing a data storage capacity of the client by deleting the one of the client documents designated for deletion (0055 as erasure of a data item).

With respect to claim 16, Loveland teaches A computer program product for use with a computer system having a server with a server database, the server database storing a plurality of documents accessible to a client, the computer program product comprising a non-transitory computer useable medium having embodied therein program code (0026, 0034, therein Loveland teaches computer-executable instructions to carry out the following program code functions) comprising:

program code for calculating at the server database (0013, 0044, and 0056), for a plurality of clients (0039; e.g. a synchronization server that synchronizes with a number of wireless devices), a document score (0015; e.g. value of data is considered) for each document (0015; e.g. data) in a plurality of documents (0056; data items) in the server database (Fig. 2, server store 221), each document score designating an importance (0044; e.g. wherein important emails or contacts are determined and 0054; e.g. important information) relative to other documents (0044; e.g. emails from a particular sender may be of greater value to a user) of a respective one of the documents to a respective one of the clients (0058; e.g. information considered important of a mobile phone user) at one of the times (0059; e.g. account activity detected in the morning), each document score (0015; e.g. value of data) indicative of

whether the document should be synchronized between the respective client and the server database (0013, 0015, and 0042; e.g. Loveland teaches selection rules take into consideration the value of data in the determining whether a data item ought to be synchronized), wherein calculating the document score includes determining whether a relationship exists between the respective document and another of the documents in the server database (0044);

program code for initiating a synchronization task at one of the clients (0047; e.g. the determination to synchronize is a user-issued instruction from the mobile device user), the synchronization task for updating documents in the client database to match documents in the server database (0006), the synchronization task specifying a threshold value that indicates the document score value for a document to be synchronized (0045; e.g. data items must have at least a predetermined value in order to be synchronized), and identifying the server and the server database for synchronization (0038);

a list of server documents produced based upon a comparison of the threshold value (0045) to the document scores (0056; e.g. the server determines which data items are appropriate to synchronize. Therein these items determined are interpreted as a “list”); and

Although Loveland teaches calculating a document score as determining the value of a data item and further at least calculating a document score for a time, Loveland does not appear to expressly teach calculating for a plurality of times, a document score.

Leung, however, teaches calculating for a plurality of times, a document score (col. 11 lines 53-67; e.g. data usage criteria information that specifies criteria related at least to a creation date, modification date, time of last access) for considering data usage information in determining placement of data.

Accordingly, in the same field of endeavor, (e.g. communicating data to a client), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the usage information as taught by Leung would have given Loveland the ability to further determine a value of a document to be synchronized for the benefit of making the synchronization more user-friendly and efficient. Loveland discloses a need for such a teaching in paragraphs 0058-0059 wherein a user desires the latest information.

Loveland teaches determining which data items are appropriate to synchronize and user selection of data item to synchronize (0056) as documents produced based upon a comparison of the threshold (0045, 0049); however, Loveland and Leung do not appear to expressly teach program code for sending the appropriate items (i.e. sending from the identified server and server database to the client) as a list and program code for sending from the client to the identified server a fetch list based upon the list of server documents; program code for transmitting one of the documents in the server database to the client based on a the fetch list.

Cameron, however, discloses sending from the identified server and server database to the client a list of server documents (0052 wherein a list of documents are added to a synchronization list on the server 102 and the list of synchronizable

documents are provided to the small device) and program code for sending from the client to the identified server a fetch list based upon the list of server documents (0052 wherein a user may select documents from the list to be synchronized); program code for transmitting one of the documents in the server database to the client based on a the fetch list (0052, 0056; e.g. transferring the server document in a synchronization process) for providing a list of documents to be selected to synchronize.

In the same field of endeavor, (i.e. synchronizing), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings provided by Cameron would have given a user of Loveland and Leung the ability to freely choose documents to be sent for synchronization to their device. Loveland discloses the need when a user may manually select documents to synchronize (0056) and further wherein certain documents are to be synchronized with their device (0058-0060).

With respect to claim 18, Loveland does not appear to expressly teach the computer program product of claim 17 wherein the determination of the threshold value is based on a data storage capacity of the client.

Leung, however, teaches determining the threshold value based on a data storage capacity of the client (col. 9 lines 25-30; e.g. storage capacity for a storage device) for allocating memory to a particular type.

Accordingly, in the same field of endeavor, (e.g. communicating data to a client), it would have been obvious to one of ordinary skill in the data processing art at the time

of the present invention to combine the teachings of the cited references because the usage information as taught by Leung would have given Loveland the ability to efficiently utilize limited storage space (as suggested by use of a portable device).

With respect to claim 19, Loveland teaches the computer program product of claim 16 wherein the calculating a document score for one of the documents is determined from at least one of a time of creation of the document, a number of times the document has been read, a time of last access of the document and an author of the document (0044; e.g. wherein senders of emails are interpreted as authors).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loveland, Leung, Cameron, and further in view of Roberts (U.S. Patent Application 2005/0065856).

With respect to claim 14, Loveland and Leung do not appear to teach the method of claim 11 further comprising removing the designation for deletion based on a document score of the complementary document in the server database.

Roberts, however, teaches removing the designation for deletion based on a document score of the complementary document in the server database (0053 and Fig. 6b) for unchecking items that are not to be deleted.

Accordingly, in the same field of endeavor, (i.e. server/client interaction), it would have been obvious to one of ordinary skill in the data processing art at the time of the

present invention to combine the teachings of the cited references because the teachings of Roberts would have given the user of Loveland and Leung the ability to keep documents from being deleted, thus providing a more user-friendly system.

Response to Arguments

Applicant's arguments filed 5/9/2011 have been fully considered but they are not persuasive.

On page 8 of the remarks, Applicant submits that Loveland, in particular, does not calculate a document score by determining whether a relationship exists between emails. Examiner respectfully disagrees as indicated in the following:

As this element of independent claims 1 and 16 was similarly recited in depending claims 5 and 20, Examiner maintains that the relied-upon Loveland reference teaches this aspect at least in paragraph 0044.

As noted from Loveland, the value of documents are taken into consideration of selection rules in determining whether a data item ought to be synchronized (Loveland, 0013, 0015, and 0042). In paragraph 0044, Loveland teaches that the value may be determined by user preferences. For example, e-mails from particular senders, or e-mails that contain the words "coin" or "penny" may be of higher value. Herein, Loveland teaches a relationship between emails exists – for example, emails from a particular sender such as a client, boss, business partner, spouse, or the like. Moreover, another relationship is determined for placing a value to e-mails, such as those containing particular words like "coin" or "penny".

Therein from the above, Loveland teaches existing relationships between documents (such as a sender, or keyword relationship between emails) and furthermore scoring these documents with a higher value when the relationship exists than other documents so that it can be utilized by selection rules to determine that synchronization ought to take place.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT TIMBLIN whose telephone number is (571)272-5627. The examiner can normally be reached on M-Th 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROBERT TIMBLIN/
Primary Examiner, Art Unit 2167